



A Dräger and Siemens Company

# Field Service Procedure

Part Number: SP00294

Rev: D

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## Saturn 4.10 to Innovian 1.2x Upgrade Procedure

## **Change History**

<b>Revision</b>	<b>Description</b>	<b>Date</b>	<b>Approval</b>
-	Initial Release	10/16/03	
A	Updated per testing and Service feedback. Updated doc name from 4sys 1.00 to 4sys 1.xx. The current 4sys released software version is 1.01.	10/30/03	
B	Updated a section name from 4sys 1.01 to 4sys 1.1; Updated protocol selection files to be the three used at Rockford; Added to manual changes list, section H; Changed p.6 #3 from D:\Saturn to E:\Saturn.	11/14/03	
C	Updated the protocol loader run section to include running CreateUser for the Setup user.	11/14/03	
D	Changed 4sys name to Innovian, Updated the procedures with Service notes from Beta release installation at Rockford	1/7/04	
E	Changed Screen prints from 4sys directory paths to Innovian on the conversion server for attach database and Conversion scripts.	3/25/04	
F	Updated the screen prints for Configuration executable and Protocol Loader. Added null values for Usertimestamp due to database change which requires data in all usertimestamp fields, default value is 12/31/8888 12:00:00 p.m.	4/5/04	
G	Updated the Db Maintenance Plan screen shots and fixed any straggling references from 4sys to Innovian	4/12/04	
H	Updated the devices path to eliminate the \usen\ for the location of the protocol files.	4/15/04	
I	Updated screen prints for new version of protocol loader, Updated the DVD path of files.	4/22/04	
J	Update "Requirements" in intro section	5/21/04	

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## **Purpose**

This document provides the outline for upgrading Saturn Software Version 4.10 to Innovian version 1.2. The operator must have a basic understanding of Windows NT and Windows 2000.

This procedure provides instructions to upgrade a Saturn Server system. The operator must have a basic understanding of Windows NT and Windows 2000.

**Note::** This procedure, and all files used for the server upgrade portion of this document assume the "D:" drive. If either Sybase or the Database are installed on a different drive, then modify the conversion files accordingly, as indicated within the text.

## **Requirements**

- The System Server must be at Saturn Version 4.10 software.
- The following installation disks and service procedures are required for this upgrade:
  - Saturn v4.10 Protocol Update Instructions (Field Service Procedure # SP00252 Rev. A)
  - CD – Protocol Update – Saturn 4.10 (4117969-001)
  - DVD – Version 1.2 Innovian Installation (PN 4118716)
  - Innovian Information System Server Installation Procedure (# SP00292, Rev. B)
  - Innovian Information System Workstation Installation Procedure (# SP00293, Rev. C)
  - Innovian Communication System Interface (CSI) Installation and Configuration (#4118490-001, Rev. A)

## **A) Saturn Server Preparation**

1. Stop the Scheduler Service on the Server and change it to Manual on Startup.
2. Stop any other Sybase services that may be running, such as the Validate service.
3. Verify the last full and incremental backups were sent to tape and validated.

*Note:* Duke has a different Administrator password than other sites.

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## **B) Saturn Workstation Preparation**

### **For 3<sup>rd</sup> Party Clinicals**

- 1) Record the following:
  - a. TCP/IP settings
  - b. Computer/domain name
  - c. Printer settings
  - d. Saturn Port settings
  - e. HPU's - IRQ settings for COM ports 5,6,7,8 (ISOCOMM card) under NT ports applet in Control Panel Record IRQ settings

### **ALL WORKSTATIONS**

- 1) Using task manager, stop **System 1, Recorder, and NADRepAgent**.
- 2) Explore to the **QueueChk** share on the server.
- 3) Copy the contents of the **QueueChk** folder to the root of **C:** on the workstation.
- 4) Run the **bat\_check\_queue.bat** file to determine if the local queue has items in it
- 5) If the queue has items in it, reboot the workstation and run the **bat\_check\_queue.bat** file again.
- 6) If the queue still has items in it, check the **NT event log**. If there are any errors other than a Primary Key constraint error, create a new case but do not save it.
- 7) Run the **bat\_check\_queue.bat** file again.
- 8) If there are Primary constraint errors, or if queue still has items in it, contact Saturn Support.  
*Note:* If a nonclinical or a third party clinical, then perform the following (otherwise skip to step #12).
- 9) Run **bat\_drop\_databases.bat**
- 10) Check the **log\_sql\_drop\_databases.txt** file to verify DB's were dropped without error.
- 11) Contact Saturn Support if any errors are received.
- 12) Verify **System 1, Recorder** and **NADRepAgent** are stopped.
- 13) NC & HPU's - delete the files copied in step 3 above.
- 14) Disable Saturn on the workstation by performing one of the following: **Clinicals** - rename C:\NAD\preboot\preboot.exe ; **Nonclinicals** - remove Saturn from the **Start** menu.

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## C) Clearing Locked Patients and Cases

### Update Protocols

To verify all cases are complete, do the following on the server.

- 1) Launch the Sybase Central application.
- 2) Connect to the server database.
- 3) Check if the **InUse\_bol** column is set to **1** in the **PDMCase** and **Patient** tables.
  - a. Execute the '**Select \* from PDMCase where InUse\_bol = 1**' command from ISQL.
  - b. Execute the '**Select \* from Patient where InUse\_bol = 1**' command from ISQL.
- 4) If any cases are displayed when either one of these commands is executed, do the following:
  - a. Find out which workstation has the case or patient locked by looking at the **ReplicationLocation\_id** column returned from the commands executed above.
  - b. Execute '**Select \* from LocalConfiguration where SerialNumber\_int = ?**' where ? is the value from the **ReplicationLocation\_id** column and look at the **WorkstationName\_str** column to find the workstation.
  - c. Check that all cases on that workstation have been replicated.
  - d. If there are no cases or patients on the workstation, database or queue, execute the following commands from ISQL:
    - i. Execute '**Update PDMCase set InUse\_bol=0, ReplicationLocation\_id=0** where **Case\_id=?**' where ? is the case ID of the case that had the **InUse\_bol** column set to 1.
    - ii. Execute '**Update Patient set InUse\_bol=0, ReplicationLocation\_id=0** where **Patient\_id=?**' where ? is the patient ID of the patient that had the **InUse\_bol** column set to 1.
    - iii. Execute '**Commit**'.
- 5) Get the total number of rows returned from viewing the data in the **CaseAutomaticData** table.  
Write this number down for verification later in the procedure.
- 6) Execute **check\_staffduplicates.sql** in Sybase. If there are any duplicates, make the names unique by updating the middlename with an underscore after it so that the conversion can work properly.

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## D) Saturn Server Upgrade to 4.10.6.5

- 1) Run the Field Service Procedure #SP00252, sections 1 and 2 only.
- 2) Verify no errors received.
- 3) Stop the server service.
- 4) In the server service properties tab, change the **-x** parameter from TCPIP to **NONE**.
- 5) Verify the **-n** parameter is set to Saturn, otherwise change it and inform the DBA (Database Administrator) that the database server name was changed to Saturn. *Note:* Duke was set to SaturnP and needs to be changed.
- 6) Copy **DB** and **Log files** to another folder (COPY1) on the server.
- 7) Spin the copy1 files off to backup tape.

### Validate Database

*Note:* Only perform if time permits. Some sites will have this step performed a few days prior to the conversion commencing, thereby taking the chance on the last couple of day's worth of data due to the size of their database and the time it takes to validate it.

- 1) Start the server service.
- 2) Go to a DOS command prompt and change to the **nad\db** directory on the server.
- 3) Type the following at the prompt: *dbvalid -c*  
*"uid=NAD;pwd=NADADMIN;dbf=X:\nad\db\periodm.db" -o X:\nad\db\dbv.txt* (where "X" is the drive where the database is located)
- 4) A '**No Errors Reported**' message is displayed. If an error is reported, consult your NAD Database Representative and wait for further instructions.
- 5) Stop the server service.



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## E) Upgrade to Innovian 1. 2

### Server Conversion

**Note:** This procedure is designed around the use of the migration server. The migration server must be set up according to the Migration Server Setup document. The data conversion happens in three main steps. First, the Sybase DB is copied to the server; second, during the conversion the Sybase data is transferred to an SQL Server DB with the same schema, called Staging; and third, the data is converted from Staging to Periopdm.mdf.

- 1) Connect the migration server to the site's network. *Note:* As long as the site has DHCP you can simply plug the box into their network. Otherwise you'll need a valid IP address to use.  
Set the migration server's time zone to be correct for the site, and verify the '**Adjust for Daylight Saving's Time**' check box is selected. This step is **EXTREMELY IMPORTANT** because it affects all of the stored time stamps in the database that are being converted.
- 2) Copy the site's production database files, **Periopdm.db** and **Periopdm.log** from their server path **D:\NAD\DB** to the migration server's **E:\Saturn\** directory.
- 3) Verify enough disk space (at least 2.5 times the size of the database file) is available in order to convert the database.
- 4) Start the Sybase Server service and verify no errors are received.
- 5) At this point, the customer's production server can be rebuilt per the Innovian requirements and the Innovian Server Installation Procedure direction.

(sections #1 Introduction,

2 Sql Server 2000 Intallation,

5 Install the Dot Net Framework & SP 2,

6 Set Time and TimeZone,

12 Configure the Timer Server Service

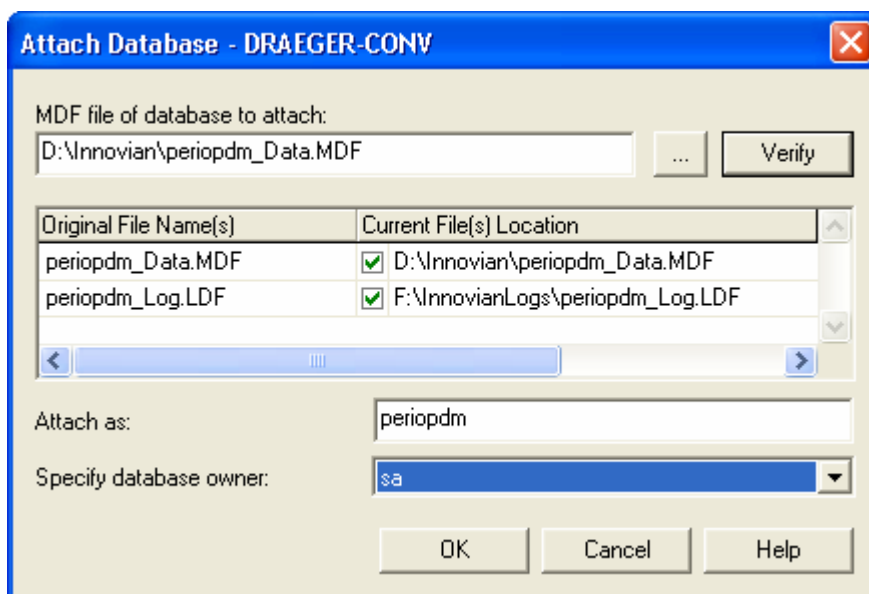
Appendix A PC Anywhere 11 Installation).

- 6) Copy the Innovian folder and all of its contents from the Server folder of the appropriate Language Pack on the DVD media to the **D:** drive. The directory structure should look like this
  - D:\Innovian\Backup
  - D:\Innovian\Configuration Utilities
  - D:\Innovian\Devices
  - D:\Innovian\DotNet Framework
  - D:\Innovian\PcAnywhere11
  - D:\Innovian\SQL Server Updates

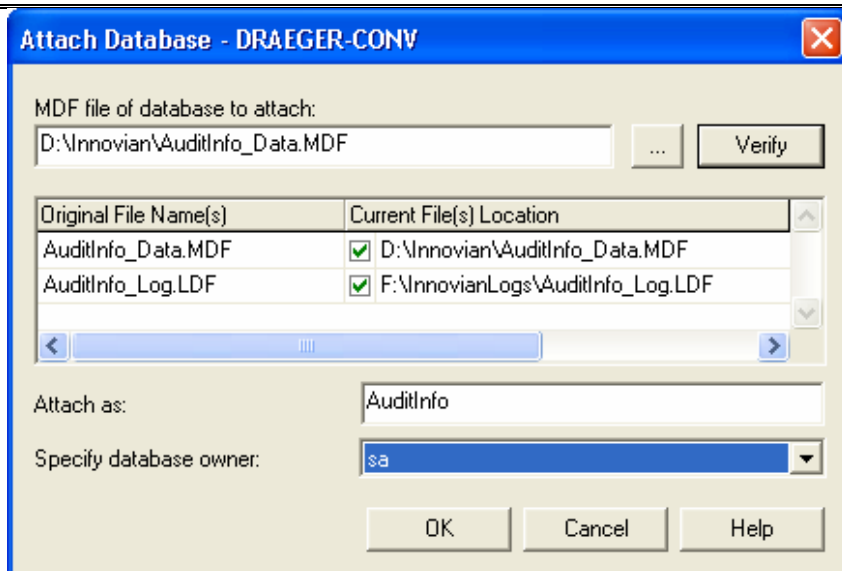
- 
- D:\Innovian\Tables
  - D:\Innovian\Tools
- 7) Copy the three released database from the D:\Innovian\Release DB\ directory into the D:\Innovian directory. The file names are: **Periopdm\_Data.mdf**, **PatientInfo\_Data.mdf**, and **AuditInfo\_Data.mdf**.
  - 8) Copy the three released DB log files from the D:\Innovian\Release DB\ directory into the F:\InnovianLogs directory. The file names are: **Periopdm\_Log.ldf**, **PatientInfo\_Log.ldf**, and **AuditInfo\_Log.ldf**.

### **Attach SQL Server Databases**

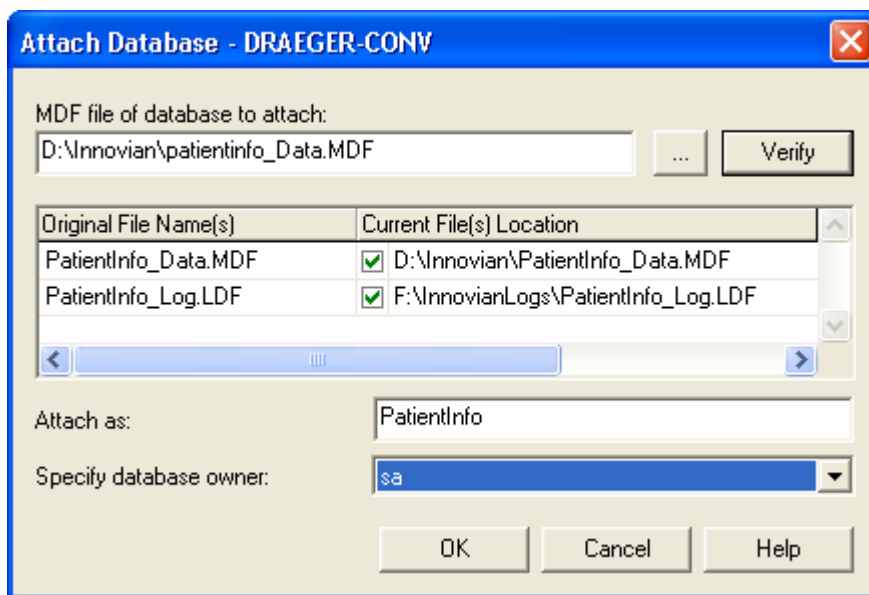
- 1) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\Periopdm\_Data.mdf**.



- 2) Change the database's log file path to be in **F:\InnovianLogs**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.
- 3) Click **OK**.
- 4) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\Auditinfo\_Data.mdf**.



- 5) Change the database's log file path to be in **F:\InnovianLogs**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.
- 6) Click **OK**.
- 7) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\PatientInfo\_Data.mdf**.

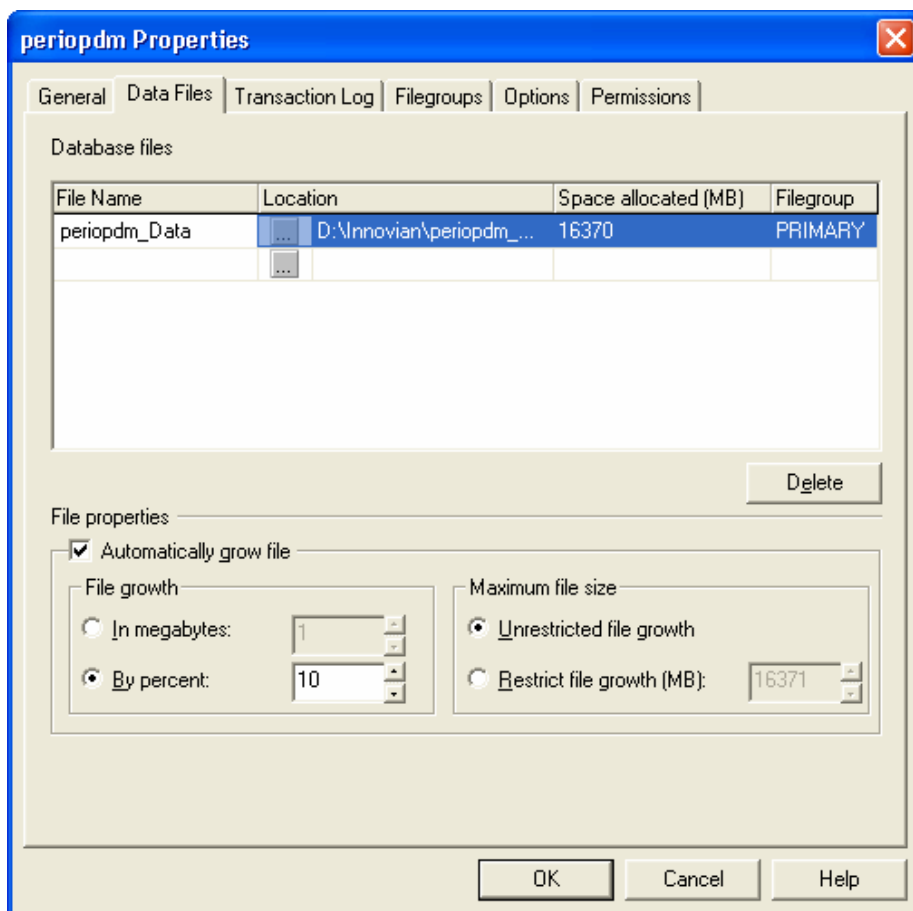


- 8) Change the database's log file path to be in **F:\InnovianLogs**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.
- 9) Click **OK**.

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## Resize Periopdm File

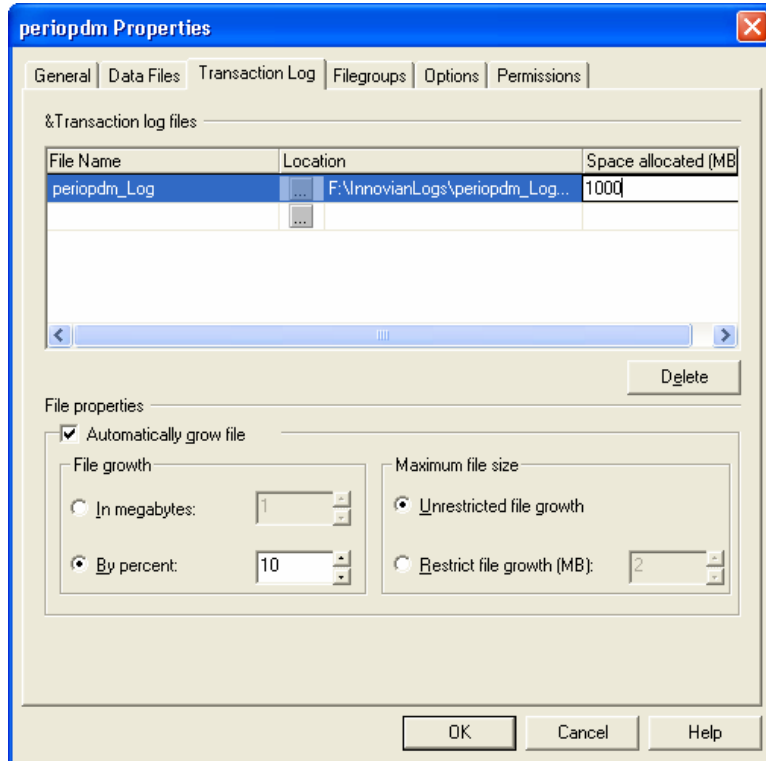
- 1) In Enterprise Manager, right-click on Periopdm database and choose **Properties**.
- 2) Select the **Data Files** tab and change the **Space Allocated** value to be the size of the current Saturn database. E.g. A 13GB database would need the value 13000 entered here.



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- 3) Switch to the **Transaction Log** tab and change the **Space Allocated** value to be 1000, for 1GB worth of space.



- 4) Select **OK**.  
*Note:* this change could take several minutes to run so be patient.

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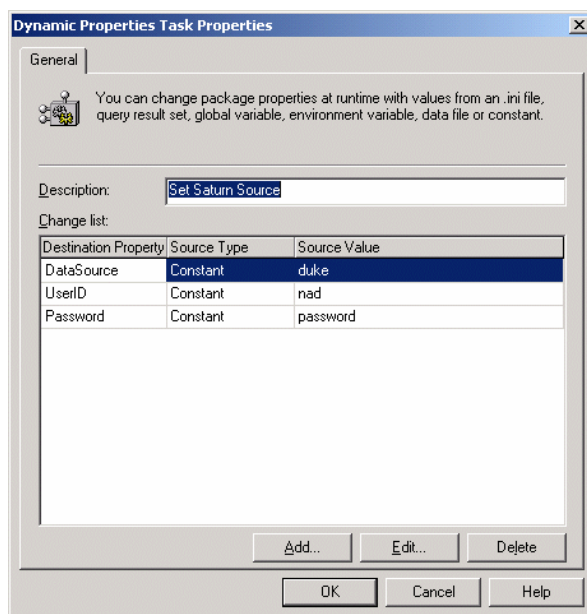
## Run DTS Package

- 1) Verify or modify the **ODBC** entry for the current Saturn database by performing the following steps.
- 2) Open **SQL Server Enterprise Manager**.
- 3) Connect to **(Local)** server and expand the **Data Transformation Services** and select **Local Packages**.
- 4) Double-click the **Saturn Migration to Innovian DTS Package**.
- 5) Double-click the **Set Saturn Source** in the upper left of the DTS Package. It looks like:

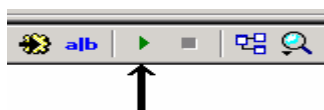


Set Saturn Source

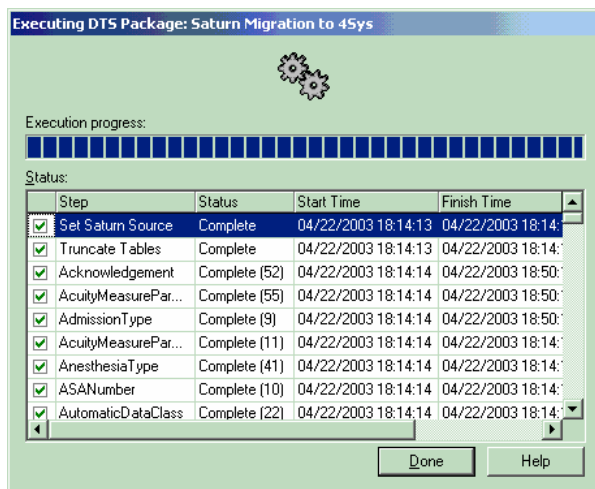
- 6) The Dynamic Properties Task Properties screen is displayed, allowing the user to change the values of the **Datasource** (ODBC datasource name for the Saturn database), the **UserID** of the Saturn database, and the **Password** of the Saturn database.



- 7) Edit the above values to provide the correct information for the Saturn database, and click **OK** to close the dialog.
- 8) Execute the package by clicking the **green arrow** on the toolbar.



The migration runs and indicators are shown in the progress dialog.



- 9) The progress continues relatively quickly until it reaches the **CaseAutomaticData** to **CasePhysiologicalData** step.

If errors occur, consult your NAD Database Representative and wait for further instructions.

- 10) When it is on the **CaseAutomaticData** to **CasePhysiologicalData** step, refer to the **Status** column to see progress.

**Note:** A 1.5 GB database will take approximately 30 minutes to convert. A 13 GB database will take approximately 3 hours to convert. A 60 GB database will take approximately 20 hours to convert.

If errors occur, consult your NAD Database Representative and wait for further instructions.

- 11) Verify that the process completes without error.
- 12) Check the conversion log file named '1 - Overall Migration Log.txt' for errors (found in the C:\DTS **Error Logs** folder). The top line should say 'succeeded'. Can also search for the words 'Error' and 'Fail'.

### Run DBCC Check Constraints

- 1) Open **Query Analyzer**.
- 2) In the database drop-down box on the toolbar, make sure **PeriopDM** is selected.
- 3) Execute this SQL statement: **DBCC checkconstraints**.

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*Note:* A 13GB DB takes approximately 22 minutes to complete.

- 4) Ensure that no errors are returned.

If errors occur, consult your NAD Database Representative and wait for further instructions.

## **F) Customer's Production Server**

**Note:** No workstations are permitted to connect to the server until noted, later in this section (F).

- 1) Copy the Innovian folder and all of its contents from the Server folder of the appropriate Language Pack on the DVD media to the **D:** drive. The directory structure should look like this
  - D:\Innovian\Backup
  - D:\Innovian\Configuration Utilities
  - D:\Innovian\Devices
  - D:\Innovian\DotNet Framework
  - D:\Innovian\PcAnywhere11
  - D:\Innovian\SQL Server Updates
  - D:\Innovian\Tables
  - D:\Innovian\Tools
- 2) Copy the following files from the DVD located at \Conversions\Saturn4.10 to Innovian 1.2.x.x to the **D:\Innovian\Tools** directory.
  - CreateSetupUser.sql
  - CreateReportsUsers.sql
  - CreateSaturnConvertedUsers.sql

### **Copy the Database Files and Logs to the Customer's Server**

- 1) Record the location of the three database files (they should be at **D:\Innovian folder**). These can be found by right-clicking on each database and choosing **Properties**. Choose the **Data Files** tab and the **Transaction Log** tab to determine the location of each of these files (they should be at F:\InnovianLogs).
- 2) Detach the database (right-click on the database in Enterprise Manager and select **All Tasks...then Detach Database**).
- 3) Once the Client's Server upgrade is complete, copy the database files (from the location previously determined) to the client's server into the **D:\Innovian** folder.
- 4) Remove the production server from the network (disconnect the network cable). No workstations are allowed to connect to the databases yet.

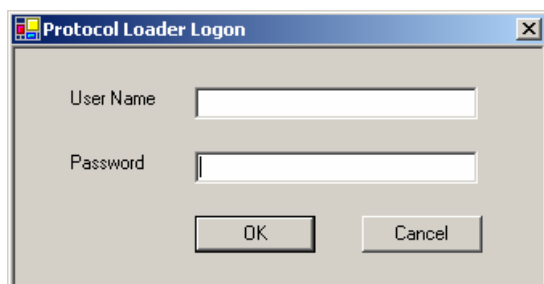


- 
- 5) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\Periopdm\_Data.mdf**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.
  - 6) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\AuditInfo\_Data.mdf**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.
  - 7) In Enterprise Manager, right-click and choose **All Tasks\Attach Database**. Browse to **D:\Innovian\PatientInfo\_Data.mdf**. IMPORTANT: Make sure to select **SA** as the owner of the database when attaching.

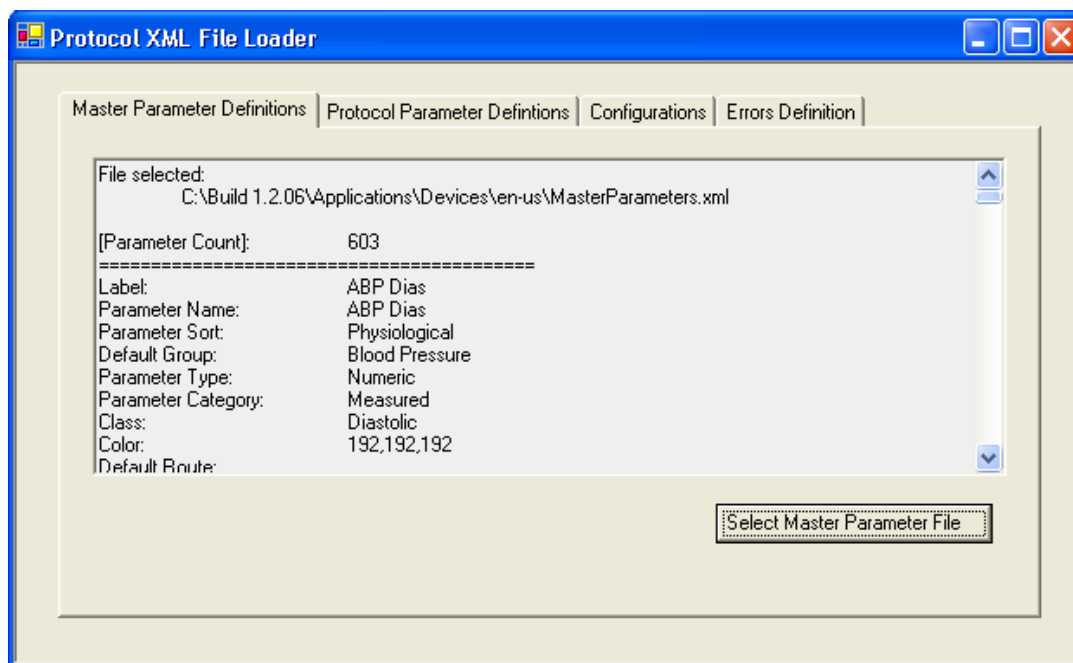
### **Run the Protocol Loader Application**

*Note:* The **Draeger.Platform.IT.Config** file must be configured correctly for this application to run successfully. Make sure the server name is correct and that fault tolerant is set to **False**.

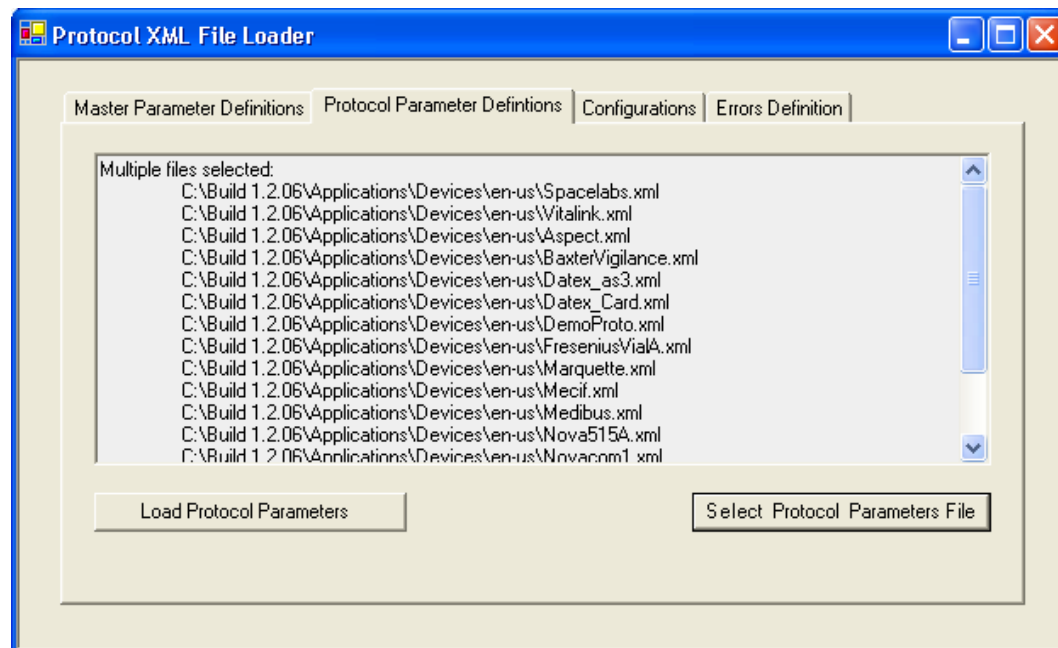
- 1) Open SQL Query Analyzer.
- 2) Verify you are attached to the Periopdm database.
- 3) Do a File Open: D:\Innovian\Tools\CreateSetupuser.sql
- 4) **Execute file**
- 5) Do a File Open: D:\Innovian\Tools\CreateReportsuser.sql
- 6) **Execute file**
- 7) Close SQL Query Analyzer.
- 8) Browse to D:\Innovian\Configuration Utilities.
- 9) Double-click **ProtocolLoader.exe**.
- 10) Log on using the **Setup user**.



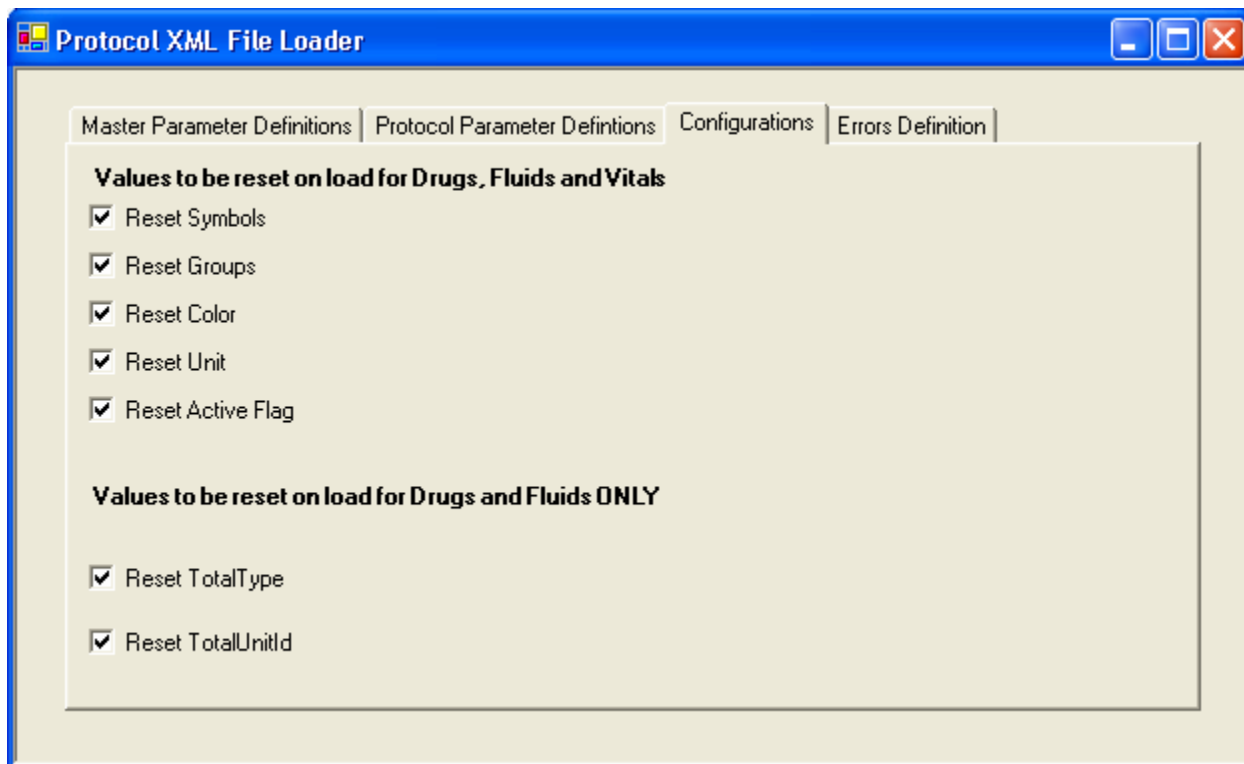
- 11) Click **Select Master Parameter File** and browse to D:\Innovian\Devices\ and select **MasterParameters.xml**.



- 12) Switch to the **Protocol Parameter Definitions** tab. Click **Select Protocol Parameters File** and browse to D:\Innovian\Devices\. Select all **.xml** files (using CTRL - Left Click filename) and then click **Open**.



- 13) This step is IMPORTANT - Select Configurations tab and check all check boxes to reset all values.

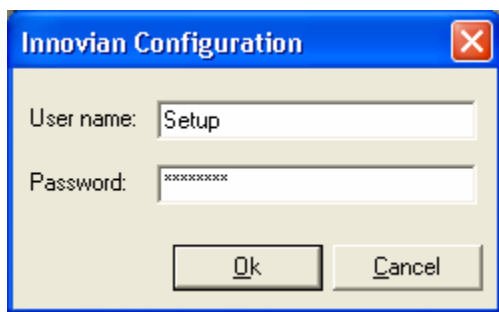


- 14) Go Back to **Protocol Parameter Definitions** tab and click **Load Protocol Parameters** and wait for the load to complete.
- 15) Select the **Errors Definition** tab and verify no errors reported.
- 16) Open **Query Analyzer** and attach to **PeriopDM**.
- 17) Open **D:\Innovian\Tools\GraphParameterLoad\_SP\_Install.sql** and execute it.
- 18) Close **Query Analyzer**.

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### Run the Innovian Configuration Application

- 1) Browse to D:\Innovian\Configuration Utilities.
- 2) Double-click the **Innovian Configuration.exe**.
- 3) Log on using the **Setup** user.

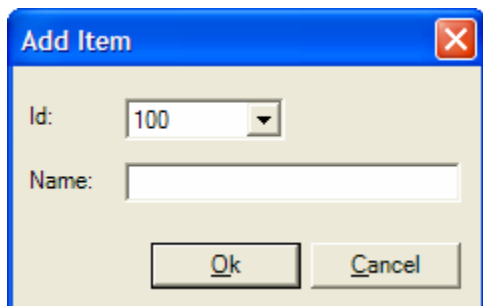


#### Notes:

If the **Options\Auto Save** check box is selected, any workstation changes made to licensed modules will be saved automatically when a different workstation is selected.

If the **Options\Auto Create** check box is selected, any new workstation that is created will automatically be configured and saved with the currently selected licensed modules.

- 4) Select **File\New** or press **Ctrl+N** to create a new workstation if any are required for the upgrade. The Add Item dialog appears. Enter the workstation **Name**, select an **Id**, and then click **OK**.



- 5) Select the workstation created in the left pane, and then select the check boxes for the appropriate licensed modules in the right pane. For previous Saturn users, you need to check the **Administrator**, **Device Interfaces**, **Recorder**, and **Reports** check boxes. If HL7 was installed at the Saturn site then you will also need to add the **System Interfaces Surgery Scheduling to 3<sup>rd</sup> Party** selection.

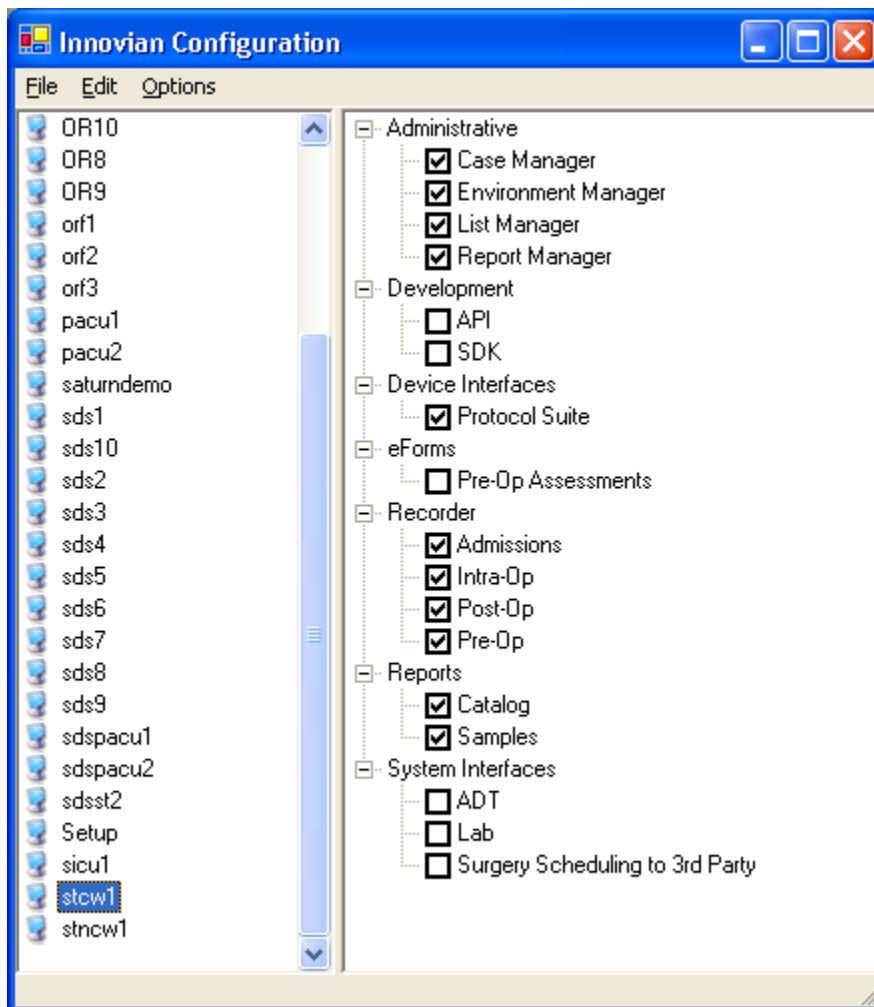
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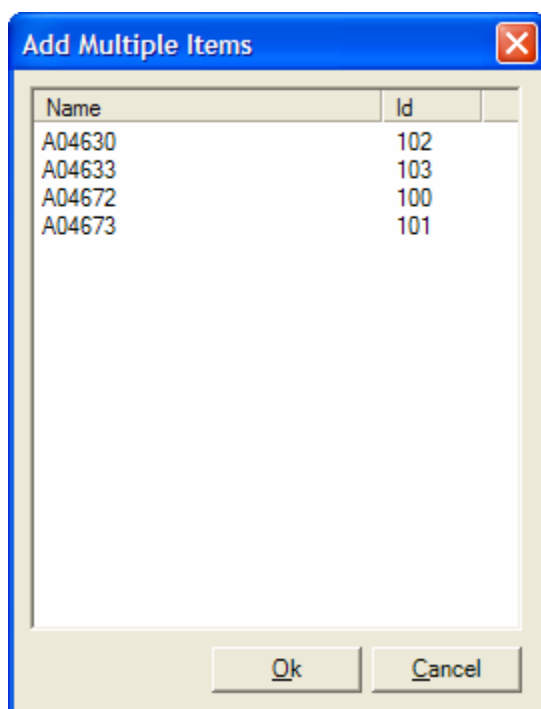
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*Note:* Ctrl-A will select all check boxes for that user.

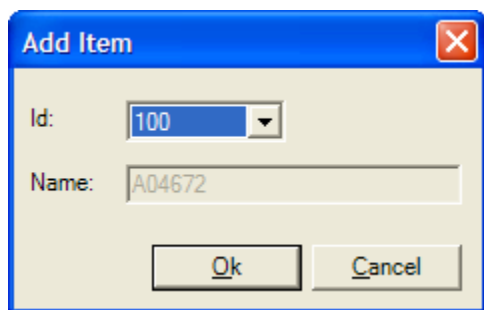
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- 6) Select **File\Save** or press **Ctrl+S** to save the changes.
- 7) Do one of these steps:
  - a. Repeat steps 4 through 6 for each licensed workstation included in the Innovian System.
  - b. Or complete steps 8 through 10 to add multiple workstations from the network.
- 8) Optionally, you may “drag and drop” multiple workstations from the network (via Explorer) to the left pane of the application. The following Add Multiple Items dialog appears:



- 9) Select and press the **Enter** key for each item in the Add Multiple Items dialog to update the Id's.  
Select and press the **Delete** key to remove an item.



- 10) When you finish updating the Id's, click the **OK** button in the Add Multiple Items dialog, and then repeat steps 5 and 6 for each new workstation.

### **Add Saturn Converted Users**

- 1) Open **Query Analyzer** and attach to **PeriopDM**.
- 2) Execute the script from **D:\Innovian\Tools\CreateSaturnConvertedUsers.sql**.
- 3) Verify or create the folder **D:\Innovian\Conversion**.
- 4) Open **SQL Server Enterprise Manager**.

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- 5) Connect to (**Local**) server and expand the **Data Transformation Services** and select **Local Packages**.
- 6) Double-click the **CreateSaturnConvertedUsers** DTS Package.
- 7) Execute the package by clicking the **green arrow** on the toolbar.



The migration runs and indicators are shown in the progress dialog.

- 8) Verify that the process completes without error.
- 9) Check the conversion log file named **1 - Create Users Log.txt** for errors (found in the **D:\Innovian\Conversion** folder). The top line should say 'succeeded'. Can also search for the words 'Error' and 'Fail'.
- 10) Close the DTS package window.

### Add Auto Archive and Patient Purge Functionality

- 1) Open **D:\Innovian\AutoArchiveSetup.sql** and execute it.  
*Note:* You will see a message that SQL Server Agent is not running, and this is OK for now.
- 2) Open **D:\Innovian\PatientPurgeSetup.sql** and execute it.  
*Note:* You will see a message that SQL Server Agent is not running, and this is OK for now.

### Update System Configuration for HL7

*Note:* Skip this section if HL7 is not installed at this site.

- 1) Update the System Configuration table per "[Innovian Communication System Interface \(CSI\) Installation and Configuration](#)" document (#4118490-00X) to reset the HL7 configuration settings.  
(HL7 settings were not converted.)

### Run DBCC Check Constraints

- 1) Open **Query Analyzer**.
- 2) In the database drop-down box on the toolbar, make sure PeriopDM is selected.
- 3) Execute this SQL statement: **DBCC checkconstraints**
- 4) Ensure that no errors are returned.  
*Note:* If errors occur, consult your NAD Database Representative and wait for further instructions.

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### **Run DBCC CheckDB on All Databases**

- 1) Open **Query Analyzer**.
- 2) In the database drop-down box on the toolbar, make sure **PeriopDM** is selected.
- 3) Execute this SQL statement: **DBCC CheckDB**
- 4) Ensure that no errors are returned.  
If errors occur, consult your NAD Database Representative and wait for further instructions.  
*Note:* this step took 9 ½ minutes on a 13GB DB.
- 5) Repeat steps 2 – 4 for the PatientInfo and AuditInfo databases.

### **Copy Databases to Backup Media**

- 1) Take all three databases off-line.
- 2) Copy all three databases and log files to a backup folder.
- 3) Spin the backup files off to tape or other backup media and verify that they are valid.
- 4) Bring all three databases on-line.
- 5) Connect the production server to the network (connect the network cable). **The workstations are now permitted to connect to the Innovian databases.** *Note:* The site's Administrator should complete his list (Section I) prior to all the workstations being allowed to connect.

### **Update the Backup and Validation Utilities**

*Note:* The DMI database utilities have been replaced with SQL Server utilities.

The recommended **Database Backup Schedule Configuration** is as follows: It is recommended that the customer run incremental backups once an hour on each database and also complete full backups once a day to minimize possible data loss in the event of a failure. It is also recommended that the backups made to the disk during this schedule are backed up to tape daily. This procedure provides steps to configure the backup schedule described above.

- 1) In Enterprise Manager, right-click on all 3 of the Innovian databases. Go into Options tab and check recovery model setting.  
**Important:** Full and transaction log backups within Microsoft's SQL Server require a Recovery Model setting of "Full." The "Simple" setting does not support transaction log dumps.
- 2) In Enterprise Manager, right-click on any of the three Innovian databases. Choose **All Tasks\Maintenance Plan**.
- 3) Click **Next**.



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- 4) Check **AuditInfo**, **PatientInfo**, and **PeriopDM** so that all three will be backed up. Click **Next**.
- 5) Click **Next**.
- 6) Select the **Check Database Integrity** check box and then click the **Change** button.
- 7) Select these options in the Edit Recurring Job Schedule dialog, and then click **OK** and **Next** when you are done.

**Edit Recurring Job Schedule**

Job name: (New Job) ☒ Enable schedule

Occurs:

- ☒ Daily
- ☐ Weekly
- ☐ Monthly

Daily

Every 1 day(s)

Daily frequency:

- ☒ Occurs once at: 12:00:00 AM
- ☐ Occurs every: 1 Hour(s) Starting at: 12:00:00 AM Ending at: 11:59:59 PM

Duration:

Start date: 6/19/2003 ☐ End date: 6/19/2003 ☒ No end date

OK Cancel Help

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- 8) Click **Change** and select the options to match this screen shot. Click **OK** and **Next** when you are done.

The screenshot shows the 'Edit Recurring Job Schedule' dialog box. The 'Job name' is '(New Job)' and the 'Enable schedule' checkbox is checked. Under the 'Occurs' section, 'Daily' is selected. The 'Daily' frequency is set to 'Every 1 day(s)'. Under the 'Daily frequency' section, 'Occurs once at' is selected with a time of '2:00:00 AM'. 'Occurs every' is also visible with a frequency of '1' and a unit of 'Hour(s)'. The 'Starting at' time is '2:00:00 AM' and the 'Ending at' time is '11:59:59 PM'. Under the 'Duration' section, the 'Start date' is '6/19/2003'. The 'End date' is also '6/19/2003', and the 'No end date' option is selected. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

- 9) Select these options and then click **Next**.

The screenshot shows the 'Database Maintenance Plan Wizard - (local)' dialog box, specifically the 'Specify Backup Disk Directory' step. The instruction is 'Specify the directory in which to store the backup file.' Under 'Directory in which to store the backup file:', 'Use the default backup directory' is unselected, and 'Use this directory:' is selected with the path 'D:\Innovian\Backup'. The 'Create a subdirectory for each database' checkbox is checked. The 'Remove files older than:' is set to '1' and the unit is 'Week(s)'. The 'Backup file extension' is 'BAK'. At the bottom are '< Back', 'Next >', 'Cancel', and 'Help' buttons.

- 10) Select these options and then click **Change**.

The screenshot shows the 'Database Maintenance Plan Wizard - RICCIJASON' window. The title bar includes a close button. The main heading is 'Specify the Transaction Log Backup Plan' with a sub-instruction: 'Specify the transaction log backup plan to prevent failures and operator errors.' A yellow circular icon with a database cylinder and a checkmark is in the top right. The window contains the following options:

- ☒ Back up the transaction log as part of the maintenance plan
- ☒ Verify the integrity of the backup when complete
- Location to store the backup file:
  - ☐ Tape: [dropdown menu]
  - ☒ Disk
- Schedule:
  - Occurs every 1 week(s) on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, at 12:00:00 AM.
  - [Change... button]

At the bottom are buttons for '< Back', 'Next >', 'Cancel', and 'Help'.

- 11) Select these options and then click **OK** and **Next**.

The screenshot shows the 'Edit Recurring Job Schedule' window. The title bar includes a close button. The 'Job name:' field contains '(New Job)'. The 'Enable schedule' checkbox is checked. The 'Occurs' section has three radio buttons: 'Daily' (selected), 'Weekly', and 'Monthly'. The 'Daily' section shows 'Every 1 day(s)'. The 'Daily frequency' section has two options: 'Occurs once at: 12:00:00 AM' (unselected) and 'Occurs every: 1 Hour(s)' (selected). The 'Starting at' field is '6:00:00 AM' and the 'Ending at' field is '11:59:59 PM'. The 'Duration' section has a 'Start date' of '6/19/2003' and two options for 'End date': '6/19/2003' (unselected) and 'No end date' (selected). At the bottom are buttons for 'OK', 'Cancel', and 'Help'.

- 12) Select these options and then click **Next**.

The screenshot shows the 'Database Maintenance Plan Wizard - (local)' window. The title bar is blue with a close button. The main area has a white header with the title 'Specify Transaction Log Backup Disk Directory' and a subtitle 'Specify the directory in which to store the transaction log backup file.' There is a yellow circular icon with a database cylinder and a checkmark. The main content area is light gray and contains the following options: 'Directory in which to store the backup file:' with two radio buttons: 'Use the default backup directory' (unselected) and 'Use this directory:' (selected). The 'Use this directory:' option has a text box containing 'D:\Innovian\Backup' and a browse button (...). Below this are two checked checkboxes: 'Create a subdirectory for each database' and 'Remove files older than:'. The 'Remove files older than:' checkbox has a spin box set to '3' and a dropdown menu set to 'Day(s)'. At the bottom of the main area is a text box for 'Backup file extension:' containing 'TRN'. The bottom of the window has four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 13) Select the location for the reports, how long they are kept, and then click **Next**.

The screenshot shows the 'Database Maintenance Plan Wizard - (local)' window. The title bar is blue with a close button. The main area has a white header with the title 'Reports to Generate' and a subtitle 'Specify the directory in which to store the reports generated by the maintenance plan.' There is a yellow circular icon with a database cylinder and a checkmark. The main content area is light gray and contains the following options: 'Write report to a text file in directory:' (checked) with a text box containing 'D:\Innovian\Backup' and a browse button (...). Below this is a checked checkbox 'Delete text report files older than:' with a spin box set to '1' and a dropdown menu set to 'Week(s)'. At the bottom of the main area is an unchecked checkbox 'Send e-mail report to operator:' with a text box and a browse button (...). Below the text box is a button labeled 'New Operator...'. The bottom of the window has four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

- 14) Ensure the options are the same as pictured here, and then click **Next**.

The screenshot shows the 'Maintenance Plan History' step of the 'Database Maintenance Plan Wizard - RICCIJASON'. The title bar includes a close button. The main area has a yellow icon of a database cylinder with a checkmark. The text 'Specify how you want to store the maintenance plan records.' is displayed. Under 'Local server', the checkbox 'Write history to the msdb.dbo.sysdbmaintplan\_history table on this server' is checked. Below it, 'Limit rows in the table to:' is set to '1000' rows for this plan. Under 'Remote server', the checkbox 'Write history to the server:' is unchecked, and 'Limit rows in the table to:' is set to '10000' rows for this plan. At the bottom are buttons for '< Back', 'Next >', 'Cancel', and 'Help'.

- 15) Change the **Plan name** and then click **Finish**.

The screenshot shows the 'Completing the Database Maintenance Plan Wizard' step of the 'Database Maintenance Plan Wizard - (local)'. The title bar includes a close button. The main area has a yellow icon of a database cylinder with a checkmark. The text 'You have completed the steps to create a database maintenance plan. The plan is described below.' is displayed. The 'Plan name:' field contains 'Innovian Database Backup and Maintenance'. Below it, a list of backup options is shown: 'Backup media: Disk', 'Backup destination: D:\Innovian\Backup', 'Delete backup files which are older than 3 Day(s).', 'Verify the backup after completion.', and 'Create a subdirectory for each database, to store t'. At the bottom, it says 'Reports will be generated and stored in directory: D:\Innov'. At the bottom are buttons for '< Back', 'Finish', 'Cancel', and 'Help'.

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### **Set the SQL Server Agent to Start Automatically**

- 1) Double-click the **SQL Server Service Manager** icon in the system tray.
- 2) Make sure the server you are working on is selected in the Server drop-down and the **Services** drop down has **SQL Server** selected.
- 3) Select **SQL Server Agent** in the Service drop-down.
- 4) Click the **Start/Continue** button.
- 5) Select the **Auto-start service when OS starts** check box.
- 6) Close **SQL Server Service Manager**.

## **G) Workstation Upgrade**

- 1) Update the Saturn workstations according to the "Innovian Workstation Installation Procedure – Upgrade, Install, and Disaster Recovery" document (SP00293).

*Note:* The UNC name listed in the Draeger.IT.Platform.config file's DB server names are case sensitive, in order to make the network connections.

## **H) Server Clean Up**

- 1) Delete the following folders or files on the migration server:
  - a) Delete the **D:\Innovian** database files prior to leaving the site.
  - b) Delete the **F:\InnovianLogs** files
  - c) Delete the **E:\Saturn** database and log files.
  - d) Delete the **C:\DTS Error Logs** files
- 2) Delete the following folders or files on the customer server:
  - a) Delete the **D:\Innovian\Tables** directory.
  - b) Delete **D:\Innovian\PeriopDM Configuration.dts**.
  - c) Delete **D:\Innovian\AutoArchiveSetup.sql**.
  - d) Delete **D:\Innovian\PatientPurgeSetup.sql**.
  - e) Delete the **D:\Innovian\GE** folder.
  - f) Delete the **D:\Innovian\DotNet Framework** folder.
  - g) Delete all **.mdf** files in **D:\Innovian\Terminology Databases** that have not been attached.
  - h) Delete the **D:\Innovian\PcAnywhere11** folder.

- 
- i) Delete the **D:\Innovian\Conversion** folder.
- 
- 3) **Verify** the **Site Administrator** completes the database site lists clean-up process in section H.
  - 4) Run through the **Server** section of the “Innovian System Checkout Procedure” (SP00295).

**\*\*\*\*\* Database Server Upgrade is Complete \*\*\*\*\***

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## **I) Site Administrator Duties**

**Note:** The Site Administrator needs to verify or modify some of their default site list options because of data conversion items that could not be assumed to be correct. The site's List Administrator (System Administrator) needs to review the following for correctness according to their site's needs. This list should be completed prior to allowing all workstations to connect.

- 1) Verify or modify the System Configuration information for **AutomaticCaseArchive** (previously known as PostAnnotateTime). The conversion has set the default to two days, per the new install specification.
- 2) Verify or move the AnesthesiaType site-specific list items that were migrated into the table **AnesthesiaRegionalType**. Background: Saturn AnesthesiaTypes were used in CaseAnesthesiaTypes. Saturn CaseAnesthesiaType data was split into three Innovian case tables (CaseAnesthesiaGeneralMethod, CaseAnesthesiaRegionalMethod, and CaseAnesthesiaMonitorMethod). Any 'new' items that were added to the Saturn AnesthesiaType table were added to the Innovian AnesthesiaRegionalType table, which may not be correct, but it was the most likely place to put them during the DB conversion. Some entries may need to be moved to the correct site list by the site list administrator at the site because they may belong in the general methods (Innovian list table AnesthesiaGeneralAirway).
- 3) Verify or modify **Staff Roles** in System Configuration for printed reports.
- 4) All Staff should change their password when they first log on to Innovian. All staff logons are set to 'password' after the conversion. Inform your staff. Also, you can modify the System Configuration settings in order to force the users to change their password.
- 5) All **Staff** entries need to be updated, or verified, with a Staff Role.
- 6) All **Staff Roles** need to be updated, or verified, for Required Care Areas.
- 7) All **Milestone Events** need to be configured for Color and Symbol.
- 8) **Fluid Routes:** Note that in Saturn, fluid routes were not required, but they are in Innovian. This means that if you edit an existing fluid in List Manager that does not have an associated route, then you will be prompted to enter a route in order to continue working in List Manager.
- 9) **Primary Insurance:** Note that in Saturn there was not a notion of primary insurance for a patient as there is in Innovian. Therefore, Saturn's first listed insurance was used as the primary insurance for a patient's case in the database conversion, as indicated in the printed record.
- 10) **Required Events** need to have the appropriate care area selected for each one.
- 11) **Patient Systems** entries need to be reviewed and verified or moved into their proper groups. In



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Saturn some single entries were split into two categories in Innovian and the conversion only put it in one default group, which may not be the correct one.

- 12) **Physiological Graph:** Note that the Saturn Physiological graph is now called Cardiovascular in Innovian for new cases, if selected. The old Saturn graph data items were preserved during the data conversion and the old cases will reflect those graph names, which are Cardiovascular, Gas, and Ventilation. The new Innovian graphs are called Physiological and Respiration, which have default data items of their own.
- 13) **Null** values in Saturn case data for UserTimestamp have been defaulted to 12-31-8888 12:00 P.M.



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DrägerService is a division of  
Draeger Medical, Inc.  
3122 Commerce Drive  
Telford, PA 18969  
Tel: (215) 721-5402  
(800) 543-5047  
Fax: (215) 721-5784  
Web: [www.draegermedical.com](http://www.draegermedical.com)  
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